



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification⁶:A61K 48/00, C07H 21/04, C12N 15/63,
15/86, 5/10, 15/40

A1

(11) International Publication Number:

WO 99/37331

(43) International Publication Date:

29 July 1999 (29.07.99)

(21) International Application Number: PCT/US99/01382

(22) International Filing Date: 21 January 1999 (21.01.99)

(30) Priority Data:

60/072,033

21 January 1998 (21.01.98)

US

(63) Related by Continuation (CON) or Continuation-in-Part
(CIP) to Earlier Application

US

60/072,033 (CON)

Filed on

21 January 1998 (21.01.98)

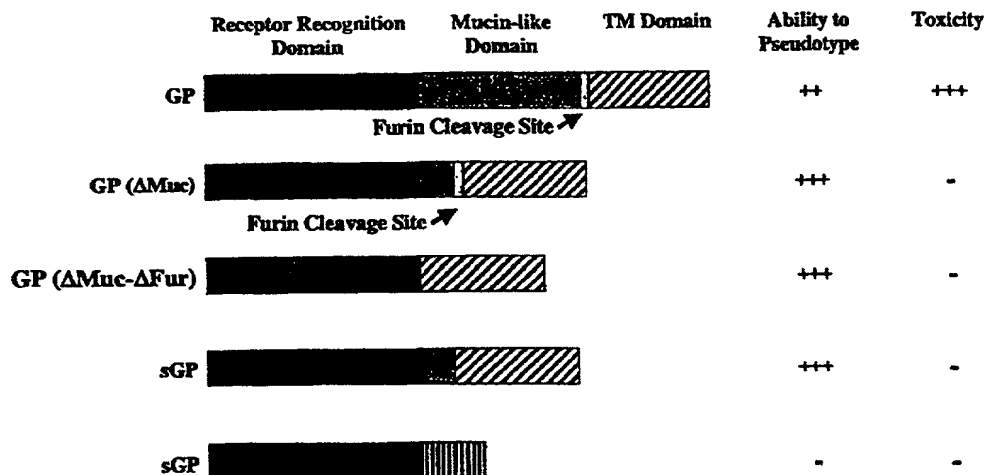
(71) Applicant (for all designated States except US): THE RE-
GENTS OF THE UNIVERSITY OF MICHIGAN [US/US];
Technology Management Office, Wolverine Tower, Room
2071, 3003 South State Street, Ann Arbor, MI 48109-1280
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): NABEL, Gary, J.
[US/US]; 385 Meadow Creek Drive, Ann Arbor, MI 48105
(US). DELGADO, Rafael [ES/US]; 1265 Crescent, Ann
Arbor, MI 48103 (US). YANG, Zhi-yong [CN/US]; 2863
Leslie Park Circle, Ann Arbor, MI 48105 (US).(74) Agents: SMITH, DeAnn, F. et al.; Harness, Dickey & Pierce,
P.L.C., P.O.Box 828, Bloomfield Hills, MI 48303 (US).(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE,
GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO
patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: TARGETING GENE TRANSFER VECTORS TO CERTAIN CELL TYPES BY PSEUDOTYPING WITH VIRAL GLYCO-
PROTEIN

(57) Abstract

The present invention provides compositions and methods for targeting gene transfer vectors to certain cell types by pseudotyping with a transmembrane form of viral glycoprotein, such as that from Ebola virus. The methods comprise the step of administering to a cell population a gene to be transferred operatively linked to an appropriate transfer vehicle, wherein the transfer vehicle is associated with a transmembrane form of viral glycoprotein.